

Abstract

This invention relates to electromechanical field, and particularly relates to improvement of a reluctance machine, and provides an outer magnetic circuit bias magnet reluctance machine with permanent magnet. The reluctance machine is made up of a housing for supporting the machine, a stator, a rotor and permanent magnets. The stator at least consists of a pair of unit constructions. The permanent magnets are placed in magnetic circuit that is made up of the housing for supporting the machine made of magnetic material and the stator. And the stator suits with an inner rotor or an outer rotor, a cup rotor, a disk rotor or a toothed rack rotor. This invention can increase sufficiently utility factor off material, depress cost, and have more application, and the ratio off performance and price of the reluctance machine is obviously higher than that of a synchronous machine.